

the proud satisfaction of seeing the scientific world flocking to its doors to learn wisdom. Our government has already given enough money to scientific work in botany and agriculture to have shown great results if rightly directed; but the results have mainly been a few padded "reports" of aimless experiments and meaningless lists and centennial "displays." Periodical "reports," gotten up with the sole idea of having every one so many pages long, or with the inspiring thought that it is so many pages longer than the last one, and "displays," express the whole desire and appreciation of our government with respect to scientific work. It is not the fault of our brethren who have the good fortune to be "government" scientists, for they are good men and anxious to do good work. But there is a factor in the whole organization of such scientific work which is fatal to good results, necessarily so; and that is, that every position is filled and every position held by that hobgoblin "political influence." When they who hold the appointing power use it to fill scientific positions for political reasons, it is hardly likely that any "science" that the world will hear of will be the result. If half of the attachés in such "centers of work" are not so much mere rubbish in the way of the other half who have the ability to work, we are much mistaken, although we may have the proportion wrong. Our plea, then, is for politics to be banished, along with the "rubbish" referred to, reports not demanded until there is something to report, the "show business" given over to perfectly capable but less scientific hands, and the specialist thus be given leisure to do work that will be a credit to himself and the government that is paying for it.

OPEN LETTERS.

White-flowered *Linum perenne*.

The instances are very numerous in which species both of animals and plants which exist in the colder regions of British America and on the mountains of Europe are common also to the elevated portions of Colorado; and it was therefore with peculiar interest that I recognized in the white-flowered form of *Linum perenne*, stated by Prof. Jas. Macoun (p. 116) to be characteristic of James Bay and Hudson Bay, a form I have myself met with in Colorado. The typical form of *L. perenne* is common in Colorado at about 8,000 feet, but above 9,000 its place is taken by a somewhat lower variety, with deeper blue petals, and, although the white form is also alpine, I only met with it on one occasion, near the boundary line between Montrose and Gunnison counties. It would be interesting to learn whether this variety exists at all in the northern or alpine regions of Europe.

THEO. D. A. COCKERELL.

West Cliff, Colorado.

Buchloe dactyloides.

Ever since Nuttall, in 1818, wrote of it, *Buchloe dactyloides* Engelm. has been recognized as one of the best forage grasses of the plains. For-

merly vast herds of buffalo, and at present the herds and flocks of the western stockman, obtain from it a great part of their winter's food. The reason of this lies in the fact that in the mature plant, as found in autumn and winter, the solid culms and stolons, together with the leaves, are perfect store-houses of food materials. Every parenchyma cell is packed with starch grains. Buchloë, when ripe, furnishes more nutriment, considering the size of the plant, than almost any other grass.

Lincoln, Neb.

JARED G. SMITH.

Color variation in flowers of *Delphinium*.

The dwarf larkspur, *Delphinium tricorne* Michx., is a common plant in many parts of the Mississippi valley, and is the only one, so far as I know, growing in the immediate vicinity of St. Louis. It is well marked by its cluster of tuberous thickened roots, the three pistils to each flower, and smooth seeds. The flowers are usually blue, and our manuals say occasionally white; but till this spring I did not see any of the white forms. Early this spring a great deal of it was found on the rocky limestone bluffs at Glencoe, Mo., appearing somewhat earlier than the blue form. Some weeks later I had occasion to collect in the region of Bluff Lake, well known to local botanists for the number of interesting phænogams found there. Not only did I find large numbers of the white-flowered form, but a beautiful purple-flowered form. This form was found, along with the blue and white forms, in rich woods. Mr. Letterman, who has closely observed this species for many years at Alenton, Mo., says the white form is not uncommon. For several years I have also observed *Delphinium azureum* Michx. at La Crosse, Wis. It is common on silicious soils. The flowers of this species are usually sky-blue or whitish, according to descriptions. So far I have not found a single blue-flowered form at La Crosse. The flowers were always white or greenish white, very much like the white form of *Delphinium tricorne*.

St. Louis, Mo.

L. H. PAMMEL.

CURRENT LITERATURE.

North American Geraniums.¹

Our Geraniums have not been revised since Torrey & Gray's Flora, about 50 years ago. In the memoir before us Dr. Trelease has presented, with his usual completeness, not only descriptions of all our species, but some biological notes concerning them, their pollination, dissemination, etc. Of the genus *Geranium* we have 10 native species; *Erodium* has 4; *Limnanthes* 4, among which is a new species (*L. Macounii*) from Vancouver Island; *Floerkea* 1; *Oxalis* 13, with a new species (*O. Suksdorfii*) from Oregon. It seems that Elliott's *O. recurva* ranges north into Ohio, Indiana, etc., having been taken for a large form of *O. corniculata*, var. *stricta* (*O. stricta* of the Manual). With the 2 species of *Impatiens*, we have thus 34 native Geraniums. The author's biological notes concerning these various species are full of interest, but too detailed for proper presentation in this review.

¹ TRELEASE, WILLIAM.—North American Geraniaceæ. From the Memoirs of the Boston Soc. Nat. Hist. iv, pp. 71-103, with 4 plates. [Issued January, 1888.]